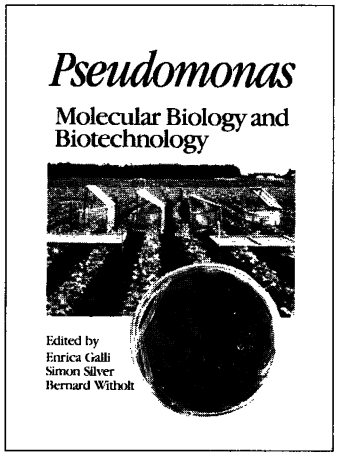
PSEUDOMONAS: Molecular Biology and Biotechnology

Edited by **Enrica Galli**, *University of Milan, Milan, Italy;* **Simon Silver**, *University of Illinois, Chicago;* and **Bernard Witholt**, *University of Groningen, Groningen, The Netherlands*

A summary of current research on an important bacterial genus and a signpost for trends in the development of modern microbiology



PUBLISHED by ASM in cooperation with the Federation of European Microbiological Societies (FEMS), this new book gathers and summarizes the latest developments in international research on *Pseudomonas* species. The contributors are representative of the science from many countries. Areas of emphasis include the molecular biology, biotechnological and industrial applications, and involvement in human and plant pathogenesis of pseudomonads. Chapters expand on the initial presentations of world experts at the Third International Symposium (Trieste, Italy, June 1991). These contents will be important for anyone interested in the various abilities and uses for pseudomonads. Students and workers concentrating on related groups of bacteria who need to understand how modern microbiology is developing, including such controversial topics as environmental release of genetically engineered microorganisms, will find this book a useful signpost.

CONDENSED CONTENTS

Estimated publication date: July 1992. Hardcover (ISBN 1-55581-051-9), approximately 456 pages, illustrated, color plates, index. **Prices:** Member (ASM, FEMS), $79.00; Nonmember, $89.00. **Canadian prices** (include 7% G.S.T.): Member (ASM, FEMS), $84.53; Nonmember, $95.23. **Shipping charges:** U.S., 1-3 copies = $2.50/book; 4+ copies = $1.75/book. Non-U.S., 1-3 copies = $4.50/book; 4+ copies = $2.25/book. **Offer Number:** 2LAS7-051-9. *Please specify this number when ordering.*

Yes, please send me a copy of *Pseudomonas:* Molecular Biology and Biotechnology.

Quantity	Offer Number	Price/Book*	Shipping/Book*	Total Cost**
_____	_____	_____	_____	_____

* See information above for prices and shipping charges. Members limited to three copies at the member price.

** Total cost = Quantity x (Price/Book + Shipping/Book).

Check method of payment: __ Check enclosed (must be in U.S. dollars drawn on a U.S. bank)

Charge to my: __ MasterCard __ Visa __ American Express __ EuroCard.

Card number:_____ Exp. Date:_____

Signature:_____ Date:_____

Member Number (ASM, FEMS):_____

Name:_____

Address:_____

City/State:_____

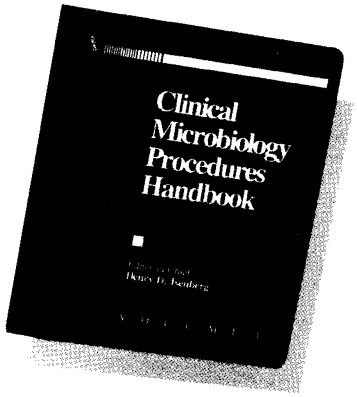
Zip/Postal Code:_____ Country:_____

Send to:
Publication Sales
American Society for Microbiology
1325 Massachusetts Ave., N.W.
Washington, DC 20005-4171
Or phone (202) 737-3600 or fax (202) 737-0368 with your charge card order.

Over 300 detailed procedures, 350 tables, 170 figures, 120 worksheets, and 70 flow charts –

Clinical Microbiology

Editor in Chief: Henry D. Isenberg



*From the publishers of the **Manual of Clinical Microbiology** and the **Manual of Clinical Laboratory Immunology** - a new procedural handbook written and designed for laboratory supervisors and technologists*

This unique handbook published by ASM provides nearly 2,500 pages of comprehensive, up-to-date, and detailed procedural information designed for step-by-step bench-level use in any clinical laboratory performing microbiological and immunological procedures.

Extremely ambitious in its scope, **CMPH** has been written in response to the growing need for a practical bench-level "cookbook" for the laboratory technologists responsible for producing accurate results in clinical microbiology labs.

More than 200 dedicated clinical scientists, laboratory supervisors, and technologists across the United States have researched and reviewed the procedures described in the **Clinical Microbiology Procedures Handbook.** They have drawn on their on-the-job experience and extensive resources to make **CMPH** the single most effective tool to advance the goal of all clinical microbiology laboratories: the accurate and timely provision of pertinent information essential for the diagnosis of infectious diseases and the choice of therapy for patients.

The contributors' tireless efforts have resulted in a clear, concise, and inclusive handbook. Designed for daily use, this superb resource will become the cornerstone for successful microbiological analysis of clinical specimens.

Step-by-step instructions

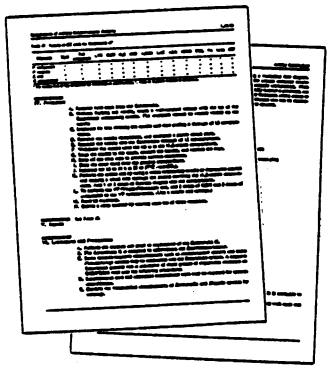
Designed with document GP2-A of the National Committee for Clinical Laboratory Standards (NCCLS) and the Clinical Laboratory Improvement Amendments of 1988 (CLIA '88) in mind, each procedure discusses (whenever applicable): **(i) the underlying principle of the test; (ii) the specimen, with definitions of acceptable submissions and directions for proper collection, transport, etc.; (iii) materials, including reagents and their preparation, supplies, and equipment; (iv) quality control; (v) procedure; (vi) results; (vii) reporting; (viii) procedure notes; and (ix) limitations.**

Sections (editors)

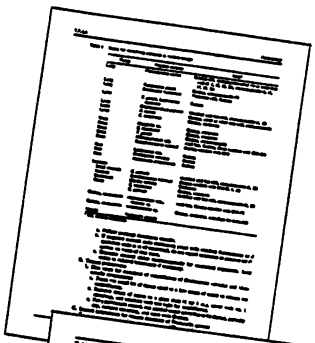
1. Aerobic Bacteriology (Marie Pezzlo)
2. Anaerobic Bacteriology (James I. Mangels)
3. Mycobacteriology (Ronald N. Master)
4. Aerobic Actinomycetes (Michael R. McGinnis)
5. Antimicrobial Susceptibility Testing (Janet Hindler)
6. Mycology (Michael R. McGinnis)
7. Parasitology (Lynne S. Garcia)
8. Virology (Lorraine M. Clarke)
9. Immunology (Alan Landay and James D. Folds)
10. Molecular Biology (Fred C. Tenover)
11. Epidemiologic and Infection Control Microbiology (Mary Gilchrist)
12. Instrument Maintenance and Quality Control (Ellen Jo Baron)
13. Quality Assurance, Quality Control, Laboratory Records, and Water Quality (David Sewell)
14. Biohazards and Safety (Ira F. Salkin and Robyn Gershon)

only 1 source: the new

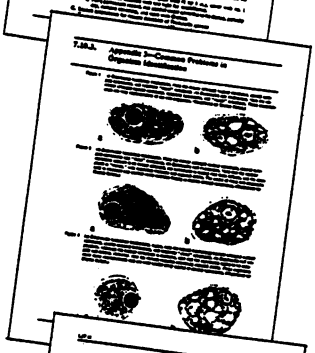
Procedures Handbook



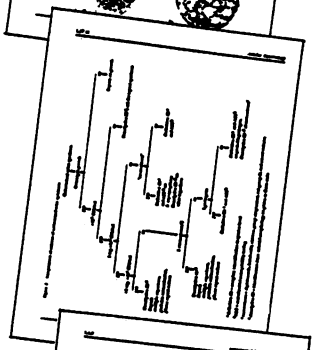
It's easy to follow the step-by-step instructions for each procedure. The language is straightforward and "user friendly." The 'Procedure Notes' often have quick tips for evaluating the results.



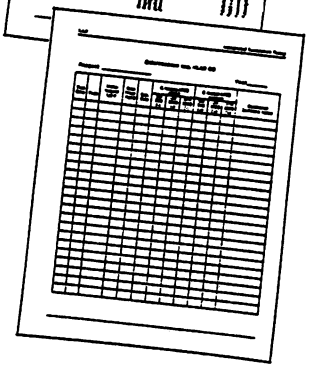
Over 300 tables provide further details at a glance whether they are identification charts, results of standard tests, or recommended media. The information provides shortcuts for bench-level analysis and decision making.



Numerous figures and diagrams illustrate various procedures, results from cultures, and equipment technology. Laboratory technologists can rapidly verify the proper techniques for handling test tubes and slides. Or compare their results with pictures from the book.



Flowcharts clearly illustrate the distinct paths leading to a correct diagnosis.



Every lab must keep track of results and equipment maintenance. Used in labs across the country already, the worksheets are designed for clarity and completeness. They may be used as they are or adapted to your lab's particular need.

Written by experienced technologists who actually work at the bench, **CMPH** is filled with tips about the tricks of the trade that facilitate the performance of tests or preparation of reagents. When indicated, guides to the interpretation of results are also provided. Three sections are devoted entirely to issues of quality control and assessment, instrument maintenance, and safety.

To aid in the analytical process, the contributions are accompanied by tables, figures, appendixes that supplement procedures, references, and suggestions for supplemental reading, information, or names and addresses of manufacturers and suppliers.

Easy to update and modify

While **CMPH** covers nearly every procedure a laboratory performs, its loose-leaf format allows easy adaptation and modification for your laboratory's specific requirements. **This format also permits future additions keeping your initial purchase up-to-date throughout the years.** Supplements will be published (sold separately) and cross-referenced to the core text. Timely bulletins will alert users of any procedural changes or recommendations that warrant immediate attention.

Guarantee your lab's reputation for providing dependable test results – order a copy of CMPH for your staff today. *For only pennies a day during the first 12 months of use,* ***CMPH*** *will easily be the most cost-effective purchase you make this year.*

Ordering Information

CLINICAL MICROBIOLOGY PROCEDURES HANDBOOK (ISBN 1-55581-038-1).
Two volumes (sold as a set), approx. 2,500 pp. in two loose-leaf, durable binders, large format, fully illustrated, charts, tables, appendixes, index, index tab dividers. Prices: Member, $195.00/set; Nonmember, $240.00/set. Canadians: Please add 7% G.S.T.
Shipping charges: U.S., 1-3 sets = $9.00/set; 4+ sets = $4.50/set. Non-U.S., 1-3 sets = $13.00/set; 4+ sets = $6.50/set.
Offer Number (please specify when ordering): 2BAS4-038-1.

Yes! Please send me the Clinical Microbiology Procedures Handbook (038-1).

Quantity	Offer Number	Price/book*	Shipping/book*	Total Cost**
_____	_____	$_____	$_____	$_____

Total Amount This Order:_____

** See ordering information. Members limited to 3 copies at the member price.*
*** Total cost = Quantity x (Price/book + Shipping/book).*

Individuals must prepay.
___Check enclosed. Checks must be in U.S. dollars drawn on a U.S. bank.
___Charge to my ___MasterCard ___VISA ___American Express ___EuroCard

Card Number_____ Expiration Date_____

Signature_____ Date_____

Member Number:

___Bill my institution or business. An authorized purchase order must be attached. Foreign orders must be prepaid.

___Please send me a pro forma invoice.

Name_____
Address_____
City/State_____
Zip/Postal Code_____
Country_____

ASM

Send to: Publication Sales, American Society for Microbiology, 1325 Massachusetts Avenue, N.W., Washington, DC 20005-4171.
Phone Publication Sales (202) 737-3600 or fax (202) 737-0368 with your charge card order.

An important, much-needed update on a major food-borne pathogen of humans...

CAMPYLOBACTER JEJUNI

CURRENT STATUS AND FUTURE TRENDS

Edited by **Irving Nachamkin,** *University of Pennsylvania School of Medicine, Philadelphia;* **Martin J. Blaser,** *Vanderbilt University School of Medicine, Nashville, Tennessee;* and **Lucy S. Tompkins,** *Stanford University School of Medicine, Stanford, California*

During the past decade, *Campylobacter jejuni* has gained recognition as probably the most common cause of sporadic bacterial diarrheal illness in the United States and a pathogen of considerable importance worldwide. *Campylobacter* enteritis is essentially a food-borne disease, and the principal vehicle of infection is raw or undercooked meat, primarily poultry, although numerous other factors have been identified. Approximately 2.4 million cases of the disease are estimated to occur annually in the United States.

This book, the first major text on *Campylobacter* infections in over 8 years, summarizes the major advances in understanding the clinical disease and epidemiology of infection which have occurred in recent years. Scientists have begun to examine the biology and pathogenesis of *C. jejuni* infection, and new genetic approaches should enable significant progress in the near future.

Persons working in *Campylobacter* research, microbial pathogenesists, clinical microbiologists, public health researchers, and infectious disease specialists will all find this a stimulating resource and an important update on the topic.

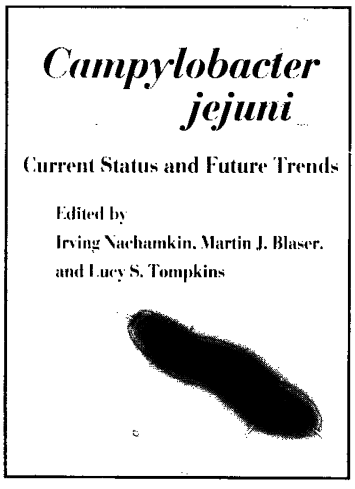
CONDENSED CONTENTS

June 1992. Hardcover (ISBN 1-55581-042-X), 312 pages, illustrated, index.

Prices: Member, $65.00; Nonmember, $79.00. **Canadian prices** (include 7% G.S.T.): Member, $69.55; Nonmember, $84.53.

Shipping charges: U.S., 1-3 copies = $2.50/book; 4+ copies = $1.75/book. Non-U.S., 1-3 copies = $4.50/book; 4+ copies = $2.25/book.

Offer number: MR 9/92-042-X.



This is my order for *Campylobacter jejuni: Current Status and Future Trends* (offer number **MR 9/92-042-X**).

Quantity	Price/Book	Shipping/Book	Total Cost*
	$	$	$

*Total cost = Quantity X (Price Book + Shipping Book).

Supply membership number (if applicable): _____

Check payment method: ❑ Check enclosed

Charge to my: ❑ MasterCard ❑ VISA ❑ American Express ❑ EuroCard

Card Number: _____ Expires: _____

Signature _____ Date: _____

Supply mailing address:

Name _____

Address _____

City _____ State/Province _____

Country _____ ZIP/Postal Code _____

Send to: ASM Publication Sales, American Society for Microbiology, 1325 Massachusetts Avenue, NW, Washington, DC 20005-4171

Charge card orders for ASM books can also be placed by phone (202-737-3600) or FAX (202-737-0368).

CASES IN MEDICAL MICROBIOLOGY & INFECTIOUS DISEASES

Peter H. Gilligan, Daniel S. Shapiro, M. Lynn Smiley
University of North Carolina School of Medicine, Chapel Hill

Designed as a supplement for traditional medical microbiology texts, **CASES IN MEDICAL MICROBIOLOGY AND INFECTIOUS DISEASES** challenges students on their working knowledge of the various disciplines of medical microbiology, including bacteriology (34 cases), mycology (9 cases), parasitology (7 cases), and virology (16 cases). The authors have developed case histories of patients seen at a major university teaching hospital whose cases represent either typical infections caused by commonly encountered organisms or life-threatening or fatal infections caused by less frequently encountered organisms.

Cases are presented as "unknowns" and are accompanied by key questions, testing knowledge in four broad areas:

1. Organism characteristics and laboratory diagnosis
2. Pathogenesis and clinical characteristics
3. Epidemiology
4. Prevention and therapy

Detailed discussions are given on the pages following each case. In many of the cases, microscopic descriptions of the organisms are given so that the differential diagnosis can be narrowed. A list of organisms to be considered as possible etiologies of infection in the cases is found at the end of each section. Color slides illustrate organisms in detail. A glossary of clinical terms is included.

Table of Contents

✔ Complete case history includes a description of the disease, patient background, and results from lab cultures.

✔ Questions guide student discussion and analysis.

✔ Detailed answers provide valuable information that will help students prepare for exams and rotations.

Yes! Please send me **CASES IN MEDICAL MICROBIOLOGY AND INFECTIOUS DISEASES.**

Quantity	Cover type	Offer Number	Price/book*	Shipping/book*	Total Cost**
	Softcover		$	$	$

Total Amount This Order: $

* See ordering information. Members limited to 3 copies at the member price. Prices are subject to change without notice.
** Total cost = Quantity x (Price/book + Shipping/book).

Check method of payment:

❑ Check enclosed (must be in U.S. dollars drawn on a U.S. bank)
❑ Charge to my: ❑ MasterCard ❑ VISA ❑ American Express ❑ EuroCard

Credit Card Number _____ Expiration _____

Signature _____ Date _____

Name _____ Member Number _____

Address _____

City/State _____ Zip/Postal Code _____ Country _____

Ordering Information: May 1992. 292 pages, glossary, color plates, index.

Prices: SOFTCOVER (ISBN 1-55581-045-4): $23.95; Canadian price *(includes 7% G.S.T.)*: $25.63.

Shipping charges: U.S., 1-3 copies = $1.50/book; 4+ copies =$.75/book. Non-U.S., 1-3 copies = $2.50/book; 4+ copies = $1.25/book.

Offer Number (please specify when ordering): SOFTCOVER - 2DAS9-045-4.

ASM

Send to:
Publication Sales, American Society for Microbiology,
1325 Massachusetts Avenue, N.W., Washington, DC 20005-4171
Or phone (202) 737-3600 or fax (202) 737-0368 with your charge card order.

Microbial Cell-Cell Interactions

Edited by **Martin Dworkin**,
University of Minnesota, Minneapolis

This well-considered compilation of reviews and discussions has as one central theme that the historical concept of microbes as essentially unicellular organisms existing independently of other organisms is conceptually incomplete and misleading; instead, microbial systems manifest a variety of cell-cell interactions and a real understanding, not only of the role of the microbe in nature but also of the nature of the microbe itself, requires that researchers begin to think of microbes as interacting biochemically, genetically, and physiologically with each other. Thus considered, it becomes apparent that the variety of cell-cell interactions manifested by microbial systems represent excellent model systems for examining the mechanistic bases of the cell-cell interactions themselves, with application to the study of multicellular interactions in higher organisms. The authors provide a representative sampling of the types of interactions among microbes, including mating interactions, developmental interactions, ecological/colonization interactions, and predator-prey interactions.

This book is directed toward any microbiologist who must deal in a practical sense or in a research context with cell-cell interactions, as exemplified by examinations of mechanisms of pathogenesis, ecological interactions, mechanisms of mating, developmental biology, predator-prey interactions, plant-microbe interactions, and formation of mixed culture communities.

CONTENTS

November 1991. Hardcover (ISBN 1-55581-037-3). 382 pages, illustrated, index.

Prices: Member, $59.00; Nonmember, $69.00. **Canadian prices (include 7% G.S.T.):** Member, $63.13; Nonmember, $73.83.
Shipping charges (orders postmarked after 31 December 1991):
U.S., 1–3 copies = $2.50/book; 4+ copies = $1.25/book.
Non-U.S., 1–3 copies = $4.50/book; 4+ copies = $2.25/book.
Offer number: MR-037-3.

Contact:

Publication Sales
American Society for Microbiology
1325 Massachusetts Avenue, NW
Washington, DC 20005-4171

Immunochemical Assays and Biosensor Technology for the 1990s

Edited by **Robert M. Nakamura**, *Scripps Clinic and Research Foundation and University of California, San Diego, School of Medicine, La Jolla*; **Yasushi Kasahara**, *Fujirebio, Inc., Tokyo, Japan*; and **Garry A. Rechnitz**, *University of Hawaii, Honolulu*

Immunochemical assays, fundamental measurement methods in biomedical research and analysis, have recently undergone revolutionary change and development deriving from innovations in the use of nonisotopic labels and in the marriage of biochemistry with electronics. Other assays in the developmental phase hold even greater promise for improved testing efficiency and for decentralization of these complex and sensitive laboratory procedures.

This volume summarizes the principles and applications of fundamental immunochemical assays, various assay formats, and the current state of the art in ultrasensitive and nonisotopic assays. It is intended primarily for anyone working with immunochemical assays who wants a comprehensive view of options now available as well as a glimpse at likely improvements which will occur in this decade. Students and practitioners of modern analytical techniques in immunology, clinical chemistry, diagnostic microbiology, serology, and medical technology will especially benefit.

CONDENSED CONTENTS

January 1992. Hardcover (ISBN 1-55581-040-3), 421 pages, illustrated, index.

Prices: Member, $43.00; Nonmember, $51.00.

Canadian Prices (include 7% G.S.T.): Member, $46.01; Nonmember, $54.57.

Shipping Charges (orders postmarked after 31 December 1991): U.S., 1–3 books = $1.50/book; 4+ books = $0.75/book. Non-U.S., 1–3 books = $2.50/book; 4+ books = $1.25/book.

Offer number: MR 9/92 -040-3.

Contact:

Publication Sales
American Society for Microbiology
1325 Massachusetts Avenue, NW
Washington, DC 20005-4171

Microbial Cell Surface Hydrophobicity

Edited by **R. J. Doyle**, *University of Louisville, Louisville, Ky.*, and **Mel Rosenberg**, *Tel Aviv University, Ramat Aviv, Israel*

Despite the voluminous journal literature on the hydrophobicity of microorganisms, its structural basis, and its role in microbial adhesion to surfaces, in differentiation, and in morphogenesis, this is the first book devoted to this subject. There has been a growing realization that hydrophobic interactions play a role in many, if not most, microbial adhesion phenomena, including microbial adhesion to soft host tissues, implants and prostheses, contact lenses, glass, oil, steel, teeth, submerged aquatic surfaces, plants, and fish.

This monograph covers in clear detail the hydrophobicities of fungi, especially *Candida* spp., and of staphylococci, streptococci, oral bacteria, soil and aquatic bacteria, the *Enterobacteriaceae*, and other Gram-negative bacteria. Each chapter is richly referenced, for those interested in delving further into a specific topic. The authors in this book were selected based on their substantial contributions to the field. Medical, applied, and environmental microbiologists; environmental, microbial, and petroleum engineers; infectious-disease physicians and researchers; and oral biologists will all benefit from this excellent summary and review.

CONTENTS

Hardcover (ISBN 1-55581-028-4). November 1990. 435 pages, illustrated, index. Member, $52.00; Nonmember, $65.00. (Canadian customers add 7% G.S.T.) Shipping charges: U.S., $1.50/book (1-3 copies) or $0.75/book (4 + copies); non-U.S., $2.50/book (1-3 copies) or $1.25/book (4 + copies). Charge card orders may also be placed by telephone (202-737-3600) or by fax (202-737-0368). Institutional purchase orders should include the offer number below.

Please send me _____ copy(ies) of *Microbial Cell Surface Hydrophobicity* (offer number MR 9/92-028-4).

Quantity	Price/Book*	Shipping/Book	Total Cost**
	$	$	$

**Canadian customers add 7% G.S.T.*
***Total Cost = Quantity × (Price/Book + Shipping/Book).*

Check payment method ☐ Check enclosed

Charge to my ☐ MasterCard ☐ Visa ☐ American Express

Card number: _____ Expires: _____

Signature: _____ Date: _____

Member number (if applicable) _____

Ship to

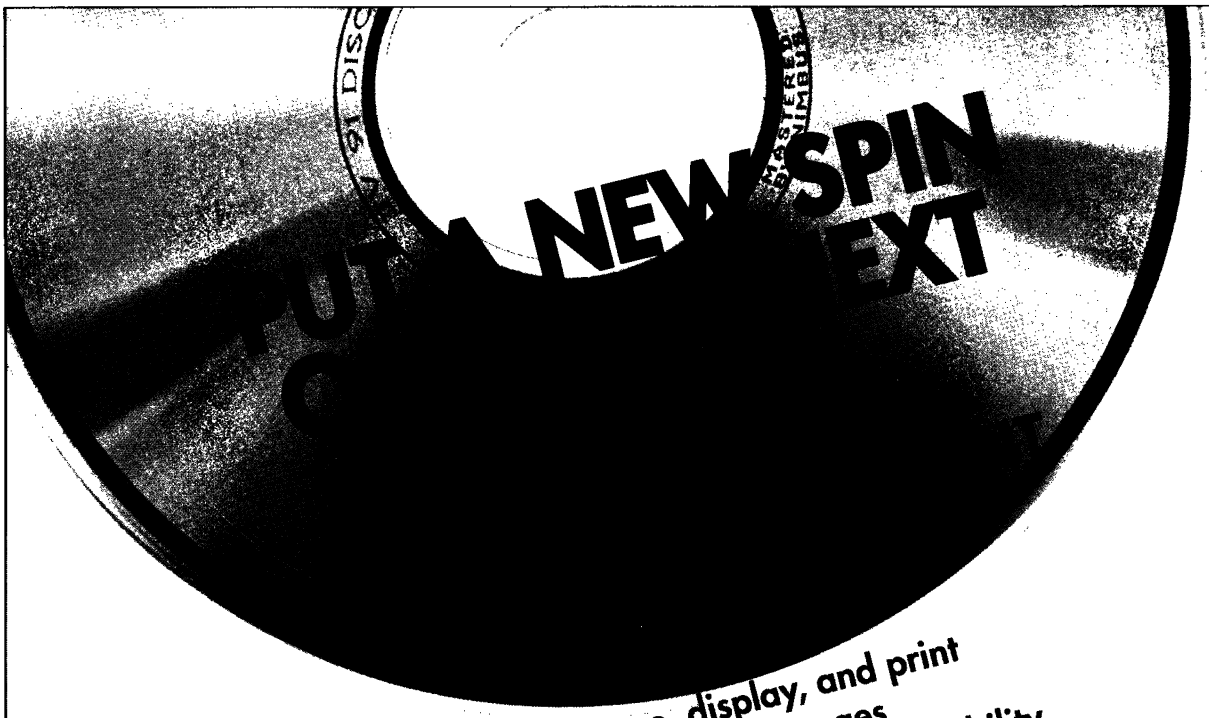
Name _____

Address _____

City/State/Zip or Postal Code _____

Country _____

ASM **Publication Sales, American Society for Microbiology, 1325 Massachusetts Avenue, N.W., Washington, DC 20005-4171**



- Retrieve, display, and print exact page images
- Complete Boolean search capability
- MS-DOS *or* Mac
- Transfer text to a floppy disk or dot matrix printer
- Receive discs monthly
- Year-end archival discs
- Free technical support

ASM
American Society for Microbiology

American Society for Microbiology
1325 Massachusetts Avenue, N.W.
Washington, DC 20005-4171

For 1993 subscription information and a technical specifications sheet, write to the Subscriptions Department at the address above or fax (202) 737-0367. Current print subscribers will automatically receive CD ordering information with their renewal forms.